System Troubleshooting Bike OK: Battery IF LATER Replace Troubleshoot Protection ISSUE Charger Was Charge Bike for 1 Minute & No LED **RETURNS** Activated Yes (overheat) Test Ride Bike Stops Replace After 1 Minute Can iWoc LED RED & be Powered Fan On ON? Bike OK: Faulty iWoc - Replace with Spare No Power: Plug in Plug iWoc Bike OK: Faulty Downtube iWoc Spare iWoc No Directly to Extension Cable. at Plug in Connections Powerplay Handlebar Charger OK Drive No Power: Faulty Powerplay (Bypassing Downtube Drive. Replace Drive Extension) iWoc Connect LED RED & Remote & Spare Fan On Bike - No ED RED & Charge Port Power to Drive &

LED

GREEN

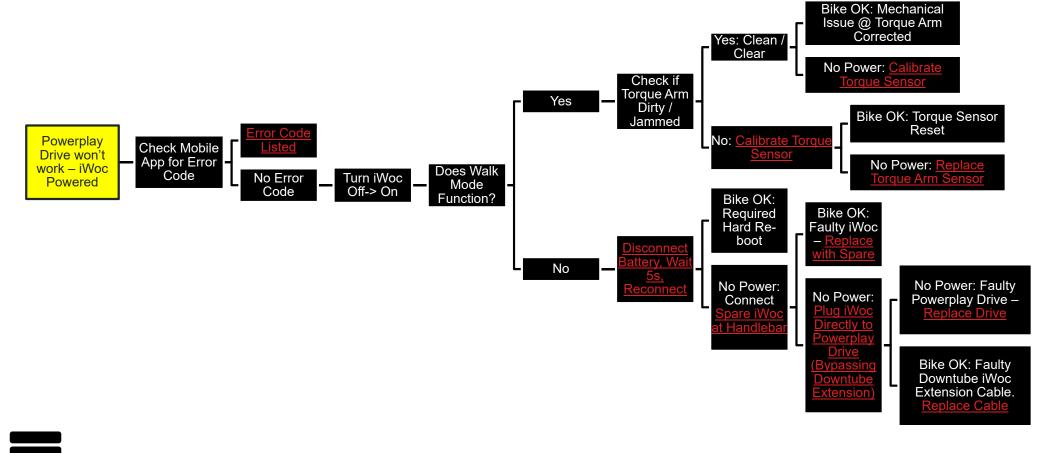
Bad Connection Fan On

LED **GREEN** Plug in

Charger

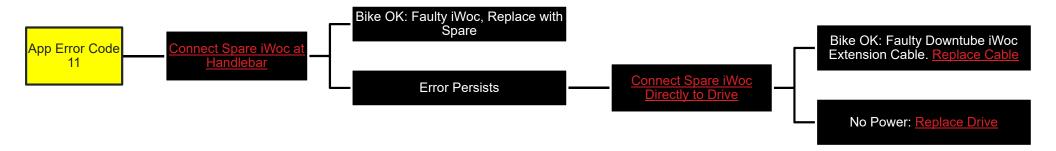
LED

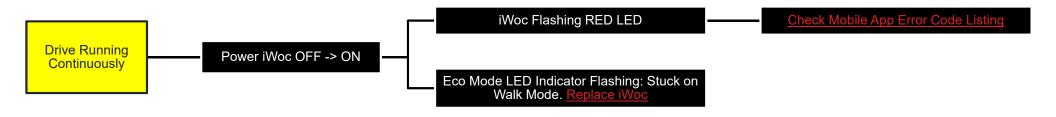
GREEN

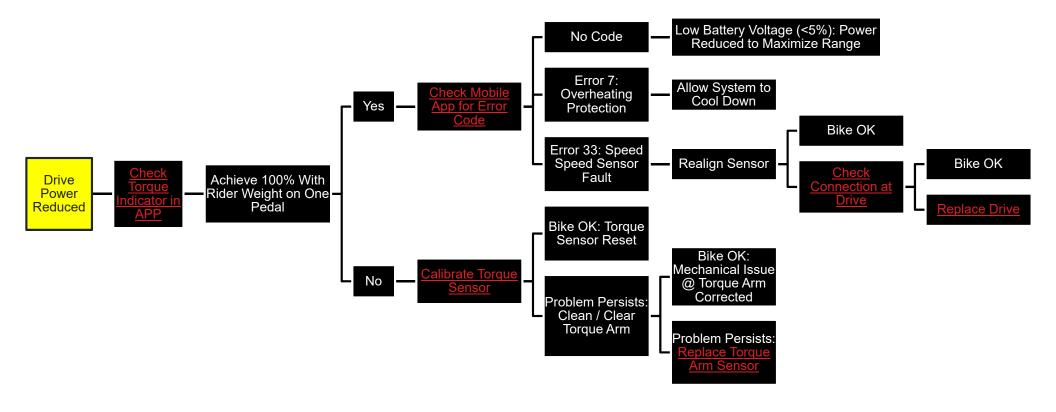


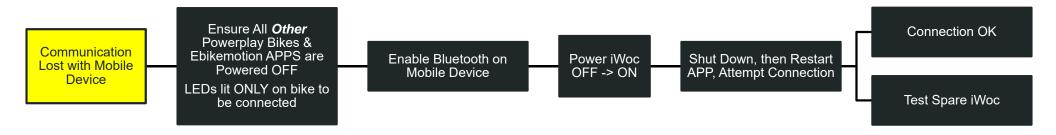
Mobile APP Error Codes

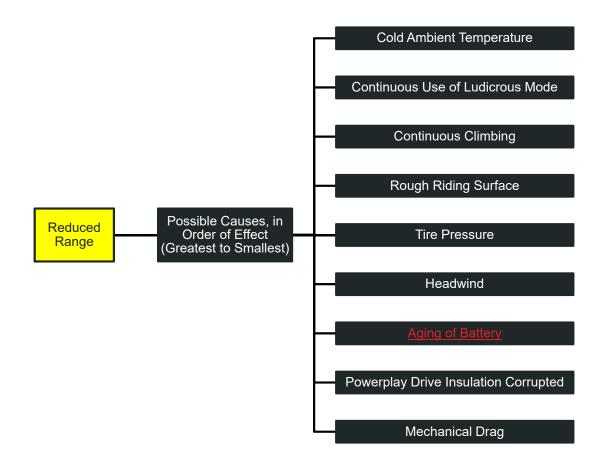
Error#	Name	Description	Possible Solution – Proceed in order		
3	Torque Fault	Torque sensor error	 Clean / Clear Torque Sensor Arm & Sensor Calibrate Torque Sensor Change Torque Arm Sensor 		
4	Low Voltage Protection	Low battery voltage	Recharge Battery		
6	Hall Sensor Fault	Drive error (error update at power up only)	Replace Drive		
7	Over Temperature Protection	Drive overheated	Allow Drive to cool down		
11	Communication Fault Lost Frame Job	Communication error between iWoc and Drive	 See Flowchart Test spare iWoc at handlebar Test spare iWoc at Drive Replace iWoc downtube extension Replace Drive 		
24	Motor Connection Error	Drive error (error update at power up only)	Replace Drive		
30	Over Current Protection	Drive error	 Power iWoc Off -> On Replace Drive 		
33	Current No Speed	Speed sensor error	 Align Speed Sensor & Magnet Replace Speed Sensor Replace Drive 		













Torque Values

Description	Part #	Location	Tool	Torque			Notes
				kgcm	Nm	lbin	
Battery Case Screw, M6X12	180566-012	Battery	4mm hex	40.8	4.0	35.4	Secures 56, 70 And 81Mm Battery Case Bolts, Blue Loctite
Set Screw, M5X20	1808024	Down Tube	2.5mm hex	20.4	2.0	17.7	Ensure Set Screw Bottoms On Battery Plate
Screw, M3X12 Torx	1807117	Charge Port	2.5mm hex	20.4	2.0	17.7	Tighten Four Screws Evenly
Screw, M5X10	180475-010	Torque Arm Pulley	3mm hex	61.2	6.0	53.1	Blue Loctite
Lockring, 12T	1347008	12T Drive Pinion	Shimano splined cassette lockring tool	407.9	40.0	354.0	Grease On Threads
Screw, Shoulder M5X6X8	1807125	Bash Guard	3mm hex	61.2	6.0	53.1	Grease Or Loctite
Screw, M6X30	180359FBY-030	Torque Arm	4mm hex	102.0	10.0	88.5	Loctite, Push Down On Torque Arm While Tightening
Screw, M6X16	180566FBY-016	Torque Arm	4mm hex	102.0	10.0	88.5	Loctite, Push Down On Torque Arm While Tightening
Screw, M8X30	18071210VT	Power Play Upper Rear Frame Mount	5mm hex	142.8	14.0	123.9	Loctite, Tighten First To 10Nm In Sequence, Then 14Nm Final
M8X60 Bolt	1808023OVT	Power Play Upper Front Frame Mount And Torque Arm	6mm hex	142.8	14.0	123.9	Loctite, Tighten First To 10Nm In Sequence, Then 14Nm Final
Screw, M8X25	1807123OVT	Power Play Bash Bracket	5mm hex	142.8	14.0	123.9	Loctite, Tighten First To 10Nm In Sequence, Then 14Nm Final
Screw, M8X65	1807122OVT	Power Play Bash Bracket	5mm hex	142.8	14.0	123.9	Loctite, Tighten First To 10Nm In Sequence, Then 14Nm Final
Screw, M8X50	1807124OVT	Power Play Bash Bracket	5mm hex	142.8	14.0	123.9	Loctite, Tighten First To 10Nm In Sequence, Then 14Nm Final
Bolt, M8X18	1807126	Chainstay Pulley Axle	6mm hex	81.6	8.0	70.8	Loctite, Ensure No Play And Pulley Spins Freely
Screw, M5X12	1807152	Chainstay Pulley Bracket	3mm hex	61.2	6.0	53.1	Loctite
Screw, M5X20	1807151	Mid Drive Pully Bracket	3mm hex	30.6	3.0	26.6	Loctite, Align Part With Shaft Spacer Before Torquing
Axle, Mid Drive	1457014	Mid Drive Pully Axle	6mm hex	102.0	10.0	88.5	Loctite, Ensure No Play And Pulley Spins Freely
Clutch Bearing Lock Ring 24Mm	1347010	Aeffect Crank	16 notch external bb cup tool	407.9	40.0	354.0	Apply Grease To Entire Clutch Bearing Spline And Threads
Clutch Bearing Lock Ring 30Mm	1347006	Turbine Crank	16 notch external bb cup tool	407.9	40.0	354.0	Apply Grease To Entire Clutch Bearing Spline And Threads
Screw, M5X10	180475-010	Speed Sensor And Derailleur Housing Hold Down Clamp	3mm hex	40.8	4.0	35.4	
Torx Screw, M5X12	1808028	Brake Rotor	T25 Torx driver	63.2	6.2	54.9	Loctite, Torque Rotor As Per Manufacturers Instructions
Cassette Lock Ring	N/A	Cassette	Shimano splined cassette lockring tool	407.9	40.0	354.0	Manufacturer Specification
Hanger Bolt	3227001	Derailleur Hanger	6mm hex	204.0	20.0	177.0	Loctite, Left Hand Thread
Axle, 12Mmx173Mm	3227009	Rear Axle	6mm hex	102.0	10.0	88.5	Grease Threads And Axle Shaft
Screw, M5X16	1806009	Head Tube Panel	3mm hex	15.3	1.5	13.3	Grease, Do Not Over Tighten
Screw, M5X22	18080370VT	Drive Cover, Top	3mm hex	15.3	1.5	13.3	Grease, Do Not Over Tighten
Screw, M5X12	1808036OVT	Drive Cover, Bottom	3mm hex	15.3	1.5	13.3	Grease, Do Not Over Tighten





Service Parts – Dealer Kit

QTY	ITEM	DESCRIPTION
1	iWoc Remote	Spare iWoc for diagnostics
1	Speed Sensor Cable	Spare cable for diagnostics
1	Charge Port	Spare charge port for diagnostics
1	Charger	Charger for in box charging & diagnostics
1	Cable - In Box Charging	Charger extension for in box charging
1	Cable - USB Firmware Update	Cable for firmware updates
1	Cable - Powerplay Connector	Extension for Drive firmware updates
1	Cable - iWoc Connector	Extension for iWoc firmware updates

